

thereof to the cathode of the current detecting diode 31. The phototransistor 32b of the photo-coupler 32 has an npn configuration and is connected at the emitter thereof to the ground and at the collector thereof to the positive power supply through the second resistor 34. The synchronization pulse (P) is outputted from the collector of the phototransistor 32b. It is to be noted that the positive power supply is the DC power supply outputted from the switching power supply section 14.--

### REMARKS

The foregoing changes to the specification are set out in the attachment captioned "**Version with Markings to Show Changes Made**" and are intended to correct inadvertent errors. No new matter is added. For example, it will be seen from Fig. 5 that element 123 identifies a pnp transistor and not an npn transistor. This error in the paragraphs at pages 4 and 5 are corrected. Similarly, it is appreciated that, in the United States, the conventional input AC voltage is 60 Hz and not 50 Hz. The error noted at page 9 is corrected. Likewise, it will be appreciated from the context of the paragraph bridging pages 9 and 10 that power supply device 201 is intended to operate with various types of equipment, such as a personal computer or a digital broadcast receiver. The error noted in this paragraph is corrected. Still further, the obvious typographical error at page 16 is corrected. Finally, it is seen from Fig. 2 that the synchronization pulse P is provided from a collector of the phototransistor and not from the photodiode. The error noted at page 20 is corrected.

Subject to the approval of the Examiner, Fig. 3 is corrected to properly indicate that the waveform representation of current is relative to the value of 0 amps, and this should be designated as  $0_A$ .

PATENT  
450100-03565

The entry of this Amendment and early examination on the merits are respectfully solicited.

Kindly charge the cost, if any, required by this Preliminary Amendment to our Deposit Account No. 50-0320.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION:**

The paragraph at page 4, line 17 through page 5, line 1 is amended as follows:

--The detection section 114 having such a configuration a described above generates the detection pulse (r) from the collector of the [npn] pnp transistor 123. The detection pulse (r) exhibits 0 (volt) in a steady state wherein the output DC voltage ( $V_{DC}$ ) is stabilized. If the output DC voltage ( $V_{DC}$ ) drops by a predetermined voltage ( $\Delta V$ ) from the voltage of the steady state, then the detection pulse (r) rises up to the predetermined voltage and turns ON.--

The paragraph at page 3, lines 4-18 is amended as follows:

--Since the power supply device 101 holds, at the power supply section 113 thereof, residual power after the input AC voltage ( $V_{AC}$ ) stops (at time  $t_{101}$ ), the output DC voltage ( $V_{DC}$ ) is continuously outputted to the secondary side for a while. If the residual power decreases, then dropping of the output DC voltage ( $V_{DC}$ ) is started. Here, if the output DC voltage ( $V_{DC}$ ) drops by the predetermined voltage ( $\Delta V$ ) from the voltage of the steady state (at time  $t_{102}$ ), then the [npn] pnp transistor 123 of the detection section 114 turns ON and the detection pulse (r) turns ON. The detection pulse (r) is conveyed to the electronic equipment side. The electronic equipment performs an ending process including storage or backup of process data or the like when the detection pulse (r) turns ON.--

The paragraph at page 9, lines 1-5 is amended as follows:

--The detection section 214 generates a pulse synchronized with the input AC voltage ( $V_{AC}$ ). Accordingly, upon steady operation, the synchronization pulse (P) which has a frequency of, for example, [50Hz] 60Hz is generated from the detection section 214.--

The paragraph at page 9, line 20 through page 10, line 6 is amended as follows:

--Accordingly, different from the first related art power supply device 101 described above, the second related art power supply device 201 directly monitors the input AC voltage ( $V_{AC}$ ) and discriminates whether or not the input AC voltage ( $V_{AC}$ ) is disconnected abnormally. Consequently, the second related art power supply device 201 can convey the abnormal disconnection to the electronic equipment side before the output of the DC voltage ( $V_{DC}$ ) drops. Therefore, the abnormal disconnection can be conveyed more quickly than the first related art power supply device 101. Consequently, in the second related art power supply device 201, the time ( $t_{f2}$ ) which can be used for the ending process by the electronic equipment from the time ( $t_{202}$ ) at which the detection pulse (r) turns ON to the time ( $t_{203}$ ) at which the voltage value ( $V_{TH}$ ) necessary for performing the ending process is obtained can be made longer. Further, the second related art power supply device 201 can cope with an electronic equipment including a personal computer [and] or a digital broadcast receiver, wherein the ending process time is relatively long.--

The paragraph at page 16, line 11 through page 17, line 4 is amended as follows:

--The power supply device 1 includes an input terminal 11 to which a domestic input AC voltage ( $V_{AC}$ ) is inputted, an inputting switch 12 for performing switching on/off of the AC input, a rectification section 13 for rectifying the input AC voltage ( $V_{AC}$ ) inputted through the input terminal 11, a switching power supply section 14 for converting a voltage obtained [by the rectification by] by the rectification section 13 into a stabilized DC voltage (output DC voltage:

$V_{DC}$ ), a primary side capacitor 15 provided on the primary side of the switching power supply section 14, a current detection section 16 for detecting supply current (i) supplied from the rectification section 13 to the switching power supply section 14, and a control section 17 for detecting abnormal disconnection of the AC input based on the synchronization pulse (P) generated from the current detection section 16.--

The paragraph at page 20, lines 6-18 is amended as follows:

--The photo-diode 32a of the photo-coupler 32 is connected at the anode thereof to the anode of the current detecting diode 31 through the first resistor 33 and connected at the cathode thereof to the cathode of the current detecting diode 31. The phototransistor 32b of the photo-coupler 32 has an npn configuration and is connected at the emitter thereof to the ground and at the collector thereof to the positive power supply through the second resistor 34. The synchronization pulse (P) is outputted from the collector of the [photo-diode 32a] phototransistor 32b. It is to be noted that the positive power supply is the DC power supply outputted from the switching power supply section 14.--